". . . 23 Juli, 1883

"Verehrter Herr College,—Ihre freundliche Gesinnung gegen mich, ermuthigt mich, Ihnen folgenden Fall vorzutragen, mit der Bitte möglichst viele Ihrer Herrn Collegen und, wenn Sie es für gut halten, auch die Presse davon in Kenntniss zu setzen.

es für gut halten, auch die Presse davon in Kenntniss zu setzen. "Ich hatte schon öfter aus England Briefe erhalten von Candidate für irgendwelche . . . Professur mit der Bitte ein Zeugniss ueber ihre Leistungen anzustellen. Ich habe, da mir diese Art der Bewerbung, wie sie in England leider gebräuchlich ist, im höchsten Grade zuwider, meist derartige Schreiben gar nicht beantwortet. Neulich erhielt ich nun aber einen Brief aus . . . von einem gewissen . . . der an Schamlosigkeit Alles uebersteigt, zum Mittel der Bestechung greift. Es klingt unglaublich, aber Herr . . . ist so schamlos, mir als Preis für ein Empfehlungschreiben Geld anzubieten. Damit Sie sich selbst davon ueberzeugen können, sende ich Ihnen das Original mit der ergebensten Bitte mir dasselbe nach gewonnener Einsicht bezw. Abschrift, wieder zurückzusenden. Eingelegt war eine Anweisung auf I guinea! Letztere sende ich heute ohne Brief recommandirt an . . . zurück. Ich habe Beider hier meinen Freunden gezeigt und werde auch vor Zeugen die Rücksendung der Anweisung auf I Guinea vornehmen.

der Anweisung auf I Guinea vornehmen.

"Ich glaube, verehrter Herr College, dieser Fall ist dazu angethan, weiteren Kreisen mitgetheilt zu werden, um zu verhindern dass ein solch erbärmlicher Mensch wie . . . etwas die Stelle in . . . erhalte. Ihnen im voraus für Ihre Mühe dankend mit vorzüglichste Hochachtung.

"Ihr Ergebenster, . . ."

I imagine that all Englishmen on reading the above will, like myself, be filled with shame that any one speaking our tongue

should have laid himself open to such a rebuke.

At the same time it seems to me quite possible that Prof. C.'s view of the matter is unduly severe and indeed unjust. I do not know Mr. A. B. personally, and am quite ignorant of what character he bears; but I can conceive that he has fallen into this disgrace through a clumsy attempt to can yout to its logical conclusion our English system of testimonials. He can hardly have thought that so distinguished and successful a man as Prof. C. could be bribed to say something handsome by a pot-office order for one guinea; and he cannot be so ignorant as not to be aware of the just pride which all Germans feel in the integrity and honour of their professoriate; it is quite open for us to sup lose that he was really offering Prof. C. a fee for a profession al service. And really when you come to think of it, this is a point of view for which something may be said. Only last we k, in talking to a colleague about testimonials, I asked him how many testimonials he wrote on an average a week. He replied that he thought not more than a dozen or fifteen. In fact when a man, especially one who has spent some years in teaching, has acquired a certain reputation in science, the tax upon his time and energy for the skilful composition and wriving of appropriate testimonials amounts during his lifetime to a something which, converted at the market value of his powers into pounds, shillings, and pence, would appear no mean sum.

Now—and this is the kernel of the matter—no one would grudge time spent in assisting a deserving man to get into a place for which he was fitted; but our testimonial system has nowadays reached such dimensions that only a few of the testimonials written have this end in view. I am writing freely, because this is a very serious matter, and one which I have much at heart; I therefore do not hesitate to say, what indeed is well known, that great skill has been reached by many in the art both of writing and reading testimonials. Many testimonials are framed after that well-known formula for acknowledging the receipt of pamphlets which runs as follows:—"Dear Sir,—I beg to thank you for the valuable pamphlet which you have so kindly sent me, and which I will lose no time in reading." And I heard the other day a testimonial praised because it showed

the electors whom not to elect.

Surely the time has come to consider whether this plague of testimonials (for it is hardly less) cannot in some measure be stayed. At all events, cannot in higher places at least some steps be taken to mend matters? When such a post as a professorship is vacant, it is the duty of the electors to make themselves acquainted with the manner of man wanted and to find him; our present plan lays upon all persons connected with the subject of the chair the burden of trying to enlighten the electors as to the claims of this or that candidate. A passage in Prof. C.'s letter shows how degrading the Germans think our method; and it is not agreeable to Englishmen to read such

passages. Yet every one who has had to struggle for a post with testimonials must feel that such criticisms are just, and that the process is one distasteful to a right-minded man. And it is also unnecessary. I, for one, would rejoice to see the German system of a "call" introduced into our professorial elections; but if we cannot obtain this, let us at least do away with testimonials. In the recent elections at the University of Cambridge, the following significant phrase occurred in the announcements of the vacancies: "testimonials, if any, to be addressed, &c."; and as a matter of fact, in the cases of the four chairs recently filled up on the new system, the man chosen in each case had sent in no testimonials. Why cannot this be done in all elections to professorial chairs? Where, as may sometimes be the case, the candidates are previously not all thoroughly known, the electors, by reference, formal or otherwise, can easily make themselves acquainted with their relative merits; and indeed, as I just now said, it is their duty to make such inquiries, and not simply to collate, interpret, and form their decisions on the curious documents which we call testimonials.

Hence, though I venture to send this communication to NATURE for the purpose of making an example of Mr. A. B.'s post-office order for one guinea, I cannot help thinking that he, though sinning, is also sinned against, and that our system of testimonials is to be blamed as well as he.

M. FOSTER

### Birds and Cholera

You ask in one of your "Notes" (p. 329), what can be the cause of birds leaving a locality before the approach of cholera? The following anecdote may be of interest, but I of course cannot vouch for its having any real connection with the subject. It must have been in the summer of 1848 that I was invited to meet a party at my uncle's house in the Close at Salisbury, on the occasion of the visit of the Antiquarian Society. On arriving I found the cholera raging, and the party put off. There were in the house only the gardener and his wife, whom, having been previously servants to my father, I had known from my childhood. The gardener told me that, just before the outbreak of the disease, the man whose duty it was to oil the vane upon the spire had made his annual ascent (of 404 feet), and had perceived a foul scent, which, it seems, had not been noticed below. The inhabitants connected this with the appearance of the epidemic shortly afterwards. Birds might no doubt be affected by such a circumstance.

O. FISHER

This has been remarked before. It is recorded of the great outbreak of cholera at Salisbury in 1849—can any of your correspondents say where?—that an officer recently from India, happening to make the ascent of the Cathedral, exclaimed suddenly, "I smell cholera!" Immediately afterwards the outbreak followed, when it was observed that the birds (swallows are especially in my remembrance) had fied the neighbourhood. If these two incidents are to be trusted, it can scarcely be doubtful that there is a connection between them.

Bregner, Bournemouth, August 6

You will find a very interesting but rather sceptical paper on the supposed connection of birds leaving towns with invasions of cholera (NATURE, vol. xxviii. p. 329), by Pfarrer Häckel of Windsheim, in the monthly journal, *Der zoologische Garten* (Bavaria), September, 1873 (vol. xiv. p. 328), published by the Zool. Gesellschaft of Frankfort-on-Main.

D. WN.

Freiburg, Badenia, August 4

## Animal Intelligence

SEVERAL remarkable instances of intelligence in animals have been given in recent numbers of NATURE. Possibly the following instance of reasoning power in an elephant may not be without interest:—Some years ago I was ascending the lower part of the Darjeeling Hill Road, in the Himalaya Mountains, from Terai. At a certain part of the road, where we met a string of bullock carts, the outer few feet was encumbered by a long flattopped heap of small rounded boulders, piled there to be broken up for road metal; from the outer edge there was a steep, almost precipitous, slope. On the inner side of the road was a small drain, and then a few feet of comparatively level ground between the drain and the slope above. The carts just mentioned were of the usual kind, the body (constructed of bamboo) about

12 feet long and 33 feet broad, with the wheels near the middle, each cart being drawn by a pair of bullocks. The mahaut (driver) of the elephant I was riding having halted the animal close up to the heap of boulders, there was just room left between the elephant and the chain for the carts to pass. These carts were the ordinary vehicles of the country, and under ordinary circumstances an elephant would no more think of "shying" at them than a London dray horse would think of shying at a cab. Yet as the carts went by one by one my elephant became more and more uneasy, and finally, in spite of the efforts of the mahaut to restrain her, mounted on the heap of boulders, at the risk (which, considering how cautious elephants are in treading on suspicious ground, I believe she must have seen quite as clearly as the mahaut or I) of rolling down the slope below the road, if the rounded boulders shifted and gave way beneath her weight. It was some time before I perceived the cause of her fear. Elephants, even in India, are uncommon, and bullocks, as well as other domestic animals, generally feel considerable dread of them from their unusual appearance as well as their size. The bullocks in question were greatly frightened at having to pass so close to the bulky brute, and several of them in passing tried to get away from her by jumping the drain. It required all the efforts of the drivers to prevent their doing it. The elephant evidently saw that the bullocks were frightened and that they were trying to jump the drain, and she further calculated that if they did so the long tail of the cart would swing sharply round in the opposite direction and strike her violently across the fore legs. Of the two risks she preferred that of mounting on the heap of boulders. F. R. MALLET Calcutta, July

As NATURE frequently contains notices of intelligence in animals, I have ventured to send you the inclosed note from the Reading local paper, as containing a remarkable fact regarding intelligence in a blind horse. The writer, Mr. Gostage, is quite trustworthy, and I have taken pains to verify the truth of his statements. JOSEPH STEVENS

128, Oxford Road, Reading, August 6

NOTE PUBLISHED IN THE Reading Observer OF AUGUST 4, 1883

Sagacity of the Horse

SIR,-A circumstance so fully illustrative of the sagacity of the horse was witnessed in the neighbourhood of Mortimer last Saturday, and reported to me through the owner, that I think it worth publicity. I can vouch for its truthfulness, and if any doubt arises I can introduce such doubter to the owner. hor e under notice, an old blind one, belonging to a small tradesman and farmer, was turned out to graze on the common near the owner's house. For some cause it wound its way through lanes to the blacksmith's, where he had often been before. The entrance to the forge is difficult of access on account of the ditches on either side, but the animal reached it safely, took its stand by the forge, and then neighed. The blacksmith, being at work in his garden, and hearing a horse neigh, looked for it, and not seeing it, returned to his gardening operations. In a short time he heard it again, but could not see a horse anywhere, until he went into his shop, when he found it standing very quietly by the forge as if waiting to be shod. Thinking some one must have brought it there, the blacksmith looked at its feet, and found one with the shoe pressing into the frog, causing great pain. He then put on another shoe, and sent the horse back to its owner.

This instance of sagacity is so clear and telling that I thought it desirable to ask you, Mr. Editor, to publish it.

Yours truly,

S. Gostage

King's Street, Reading, August, 1883

ACCOUNTS are not rare of female cats having adopted the young of other creatures when deprived of their own, or while nursing their own young, but I have never met with a case like the following :-

My tom cat, Smut, whose eighteenth birthday was lately celebrated, has always been kind to kittens; and a long friendship with a tame rabbit was only terminated by the death of the rabbit in consequence of eating too much plum pudding one But his benevolence to feathered creatures was first shown in 1881, when, having a solitary chick hatched out of a clutch, I bethought me of making him useful as nurse, and with some fear put the chick into his basket. The experiment answered admirably, except that Smut sometimes licked the feathers the wrong way; and when about a fortnight afterwards the chicken was accidentally killed, it was curious to see its foster-father's search for it during the following three or four days.

Since then Smut has taken charge of as many as fifteen young chickens at a time, but he has never evinced the same affection for them as for his first feathered foster-child.

J. DE B. F. P. The Orphange, Wandsworth Road, August 7

# Different Sources of Illumination

In your issue of July 19 you give in the "Notes" (p. 281) some interesting data as to the products of combustion and heat produced by different sources of illumination, each being of 100 candle-power and giving off this light for one hour. This is valuable information, and I am sure that others besides myself would be glad if you could give a reference to the authority. I would also suggest that it would be interesting to have a comparative authoritative statement as to the carbonic acid and heat produced in the same time by an average human being. told the other day by a mining engineer that he finds that one oil-lamp contaminates the air to the same extent as one miner when at work. It is often stated that one gas-burner in a theatre is as deleterious as six members of the audience. If the true state of the case were published in your columns, it would be interesting to many. George Forbes

34, Great George Street, Westminster, July 20

[The information is based on an article in La Lumière Électrique for June 16.—ED.].

### A Remarkable Form of Cloud

An account, which will I believe be found satisfactory, of the formation of the type of cloud described in NATURE (vol. xxviii. pp. 299, 320), will be found in a paper read by me before the Meteorological Society on June 20 last, and which will be published. lished in the next Quarterly Journal of the Society. The paper is on "The Structure of Cirro-filum, or Ice-cloud disposed in Threads." A very valuable contribution to our knowledge on this subject will also be found in an article by Dr. Linn ("Ueber die Entstehung der Wolkenstreifen," Zeitschrift für Meteorologie, xviii. 52), to which I would refer those of your readers who are interested in the toric interested in the topic.

The cloud is very common, and regular reports of the direction both of movement and of "filature," elements of very considerable value in the prognosis of weather, have been, for some years past, sent to the Meteorological Office by a limited number of observers.

W. CLEMENT LEY

#### Disease of Potatoes

WHEN I read the note from Naturen in NATURE, vol. xxviii. p. 281, it appeared to me that Herr Anda was describing the same effects in the potato stalk as had been described by Berkeley in 1846. In his description of the usual potato disease Berkeley says:—"The stem now rapidly putrefies, the cuticle and its subjacent tissue become pulpy, and separate when touched from the woody parts beneath. The whole soon dries up, and in many instances exhibits in the centre the black, irregular fungoid masses which are known under the name of Sclerolium varium, and which are believed to be the mycelium of certain moulds in a high state of condensation.

Now the Sclerotium varium grows exactly as described by Herr Anda; but so far as it has appeared here, it does not seem to be truly parasitical, but only begins to be developed on the potato stalks when they are dying down of the common disease. Whether this Sclerotium is the same as that referred to by Mr. W. G. Smith (NATURE, vol. xxvii'. p. 299) I do not know, but probably it is. He says he did not get his to germinate; while Herr Anda describes the fruit of the Sclerolia found at

Stavanger,

From "pink eye" potato stalks of last year I threshed cut a quarter of a pound of Sclerotium varium, and at the present time I have hundreds of specimens germinating in the way Herr Anda describes; one stalk only has yet come to what I regard as the perfect fructification, having developed at the apex a beautiful little cup; but about a score of others of those first